

National Fire Equipment Ltd.

Lead Free Series LF009 Reduced Pressure Zone Assemblies Sizes: 1/4" - 3" (8 - 80mm)

Series LF009 Reduced Pressure Zone Assemblies are designed to protect potable water supplies in accordance with national plumbing codes and water authority requirements. This series can be used in a variety of installations, including the prevention of health hazard crossconnections in piping systems or for containment at the service line entrance. The LF009 features Lead Free* construction to comply with Lead Free* installation requirements.

This series features two in-line, independent check valves, captured springs and replaceable check seats with an intermediate relief valve. Its compact modular design facilitates easy maintenance and assembly access. Sizes $\frac{1}{4}$ " - 1" (8 – 25mm) shutoffs have tee handles.

Features

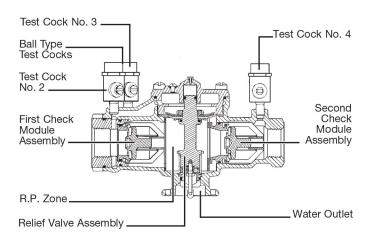
- Single access cover and modular check construction for ease of maintenance
- Top entry all internals immediately accessible
- Captured springs for safe maintenance
- Internal relief valve for reduced installation clearances
- · Replaceable seats for economical repair
- Lead Free* cast copper silicon alloy body construction for durability 1/4" - 2" (8 - 50mm)
- Fused epoxy coated cast iron body 2½" and 3" (65 and 80mm)
- Ball valve test cocks screwdriver slotted 1/4" 2" (8 50mm)
- Large body passages provides low pressure drop
- · Compact, space saving design
- No special tools required for servicing

Specifications

A Reduced Pressure Zone Assembly shall be installed at each potential health hazard location to prevent backflow due to backsiphonage and/ or backpressure. The assembly shall consist of an internal pressure differential relief valve located in a zone between two positive seating check modules with captured springs and silicone seat discs. Seats and seat discs shall be replaceable in both check modules and the relief valve. There shall be no threads or screws in the waterway exposed to line fluids. Service of all internal components shall be through a single access cover secured with stainless steel bolts. Body and shutoffs shall be constructed using Lead Free* cast copper silicon alloy materials. Lead Free* reduced pressure zone assembly shall comply with state codes and standards, where applicable, requiring reduced lead content.

The assembly shall also include two resilient seated isolation valves, four resilient seated test cocks and an air gap drain fitting. The assembly shall meet the requirements of: USC; ASSE Std. 1013; AWWA Std. C511; CSA B64.4. Shall be a Watts Series LF009.





Now Available WattsBox Insulated Enclosures.

For more information, send for literature ES-WB.

NOTICE

Inquire with governing authorities for local installation requirements

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

Available Models: $\frac{1}{4}$ " – 2" (8 – 50mm)

Suffix:

QT - quarter-turn ball valves

S strainer

LF - without shutoff valves PC - internal polymer coating

- press inlet x press outlet (1/2" - 2" only) W/Press**

Prefix:

- union connections

Available Models: 2½" – 3" (65 – 80mm) Suffix:

NRS OSY

- non-rising stem resilient seated gate valves - UL/FM outside stem and yoke resilient seated

gate valves

S-FDA FDA epoxy coated strainer

QT-FDA - FDA epoxy coated quarter-turn ball valves

LF - without shutoff valves

Note: The installation of a drain line is recommended. When installing a drain line, an air gap is necessary (see ES-AG).

Materials: 1/4" - 2" (8 - 50mm)

Lead Free* cast copper silicon alloy body construction, silicone rubber disc material in the first and second check plus the relief valve. Replaceable polymer check seats for first and second checks. Removable Relief valve seats. Stainless steel cover bolts.

Standardly furnished with NPT body connections. Model LF009QT furnished with quarter-turn, full port, resilient seated, Lead Free* cast copper silicon alloy body ball valve

Materials: 21/2" and 3" (65 – 80mm)

- (FDA approved) Epoxy coated cast iron unibody with plastic seats
- Relief valve with stainless steel seat and trim
- Lead Free cast copper silicon alloy body ball valve test cocks

Pressure / Temperature

Sizes 1/4" - 2" (8 - 50mm) Suitable for supply pressure up to 175psi (12.1 bar). Water temperature: 33°F – 180°F $(0.5^{\circ} - 82^{\circ}C)$.

Sizes 2¹/₂" and 3" (65 and 80mm) are suitable for supply pressures up to 175psi (12.1 bar) and water temperature at 110°F (43°C) continuous, 140°F (60°C) intermittent.

Standards

USC

ASSE No. 1013 AWWA C511 CSA B64.4 IAPMO File No. 1563.











Approvals

ASSE, AWWA, CSA, IAPMO

Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.

Approval models QT, PC, NRS, OSY.

UL Classified

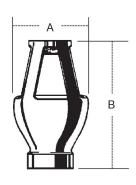
21/2" and 3" (65 and 80mm) with OSY gate valves.

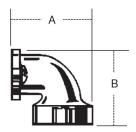
3/4" - 2" (20-50mm) without shutoff valves (-LF) (except LF009M3LF)

Air Gaps and Elbows

MODEL		DRAIN	OUTLET		DIMEN	WEIGHT			
	for 909, 009 and 993 sizes				A	Е	3		
-		in.	mm	in.	mm	in.	mm	lbs.	kgs.
909AGA	1/4"-1/2" 009,	1/2	13	23/8	60	31//8	79	0.625	0.28
	3/4" 009M2/M3								
909AGC	³ / ₄ "–1" 009/909,	1	25	31/4	83	47/8	124	1.5	0.68
	1"-1½" 009M2								
909AGF	1¼"–2" 009M1,	2	51	4%	111	6¾	171	3.25	1.47
	11/4"-3" 009/909,								
	2" 009M2, 4"-6" 993								
909AGK	4"-6" 909,	3	76	6%	162	9%	244	6.25	2.83
	8"-10" 909M1								
909AGM	8"-10" 909	4	102	7%	187	111/4	286	15.5	7.03
909ELA	1/4"-1/2" 009, 3/4" 009M2/M3	-	-	_	_	ī	-	-	-
909ELC	3/4"-1" 009/909	-		23/8	60	2%	60	0.38	0.17
* 909ELF	1¼"-2" 009M1,	-	_	35/8	92	35%	92	2	0.91
	11/4"-2" 009/909,								
	2" 009M2, 4"-6" 993								
* 909ELH	21/2"-3" 009/909	-	_	_	_	-	_	_	_
Vertical									

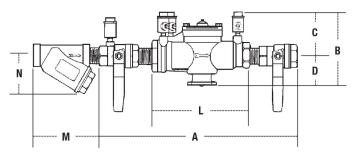
^{**} Viega ProPress® connections are optional factory-installed fitting on each end of the approved/certified assembly.





Dimensions – Weight

Size: 1/4" - 2" (8 - 50mm) LF009

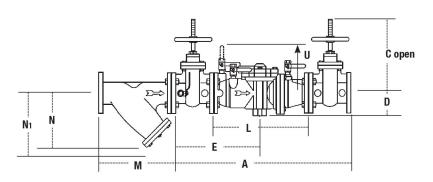


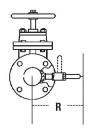
LF009 1/4" - 2"

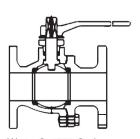
SIZE	(DN)	DIMENSIONS (APPROX.) WEIGHT														GHT	
		1	4		3	(С		D		L		Л	N			
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in	mm	in	mm	lbs.	kgs.
1/4	8	10	250	45//8	117	3%	86	11/4	32	51/2	140	23/8	60	21/2	64	5	2
3/8	10	10	250	45/8	117	3%	86	11/4	32	5½	140	23/8	60	21/2	64	5	2
1/2	15	10	250	45/8	117	3%	86	11/4	32	51/2	140	23/4	70	21/4	57	5	2
3/4	20	10¾	273	5	127	31/2	89	11/2	38	63/4	171	33/16	81	23/4	70	6	3
1	25	141/2	368	5½	140	3	76	21/2	64	91/2	241	3¾	95	3	76	12	5
11/4	32	17%	441	6	150	31/2	89	21/2	64	11%	289	47/16	113	31/2	89	15	6
11/2	40	17%	454	6	150	31/2	89	21/2	64	111//8	283	47/8	124	4	102	16	7
2	50	21%	543	73/4	197	41/2	114	31/4	83	13½	343	55/16	151	5	127	30	13

Dimensions – Weight

Size: 21/2" and 3" (65 and 80mm) LF009







Watts G-4000 Series QT – Ball Valves

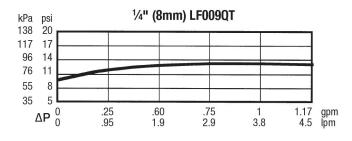
STRAI	NER SIZE		WEIGHT						
		N	1		N	N	1†		
in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
21/2	65	10	254	61/2	165	93/4	248	28	12.7
3	80	101//8	257	7	178	10	254	34	15.4

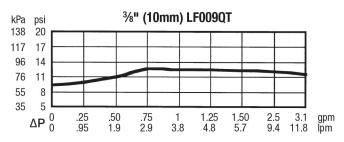
†Clearance for servicing

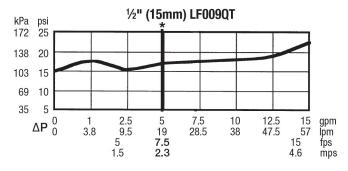
MODEL	SIZE	: DN	DIMENSIONS (APPROX.)														WEI	IGHT
			ļ ,	A			1	D		Е		L		R	U			
_	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
LF009LF	21/2	65	_	_	_	_	41/2	114	_	_	181/8	460	_	_	10%	270	76	34.5
LF0090SY	21/2	65	331/4	845	15%	403	41/2	114	16%	416	181/8	460	73/4	197	10%	270	166	75.3
LF009NRS	21/2	65	331/4	845	11%	289	41/2	114	16%	416	181/8	460	73/4	197	10%	270	161	73.0
LF009QTFDA	21/2	65	331/4	845	6	152	41/2	114	16%	416	181/8	460	73/4	197	10%	270	150	68.0
LF009LF	3	80	_	_	_	_	41/2	114	_		181/8	460	_	_	10%	270	76	34.5
LF0090SY	3	80	341/4	870	181/2	470	41/2	114	16%	422	181/8	460	83/4	222	10%	270	198	89.8
LF009NRS	3	80	341/4	870	123/4	324	41/2	114	16%	422	181/8	460	83/4	222	10%	270	191	86.6
LF009QTFDA	3	80	341/4	870	7	178	41/2	114	16%	422	181/8	460	83/4	222	105/8	270	158	71.7

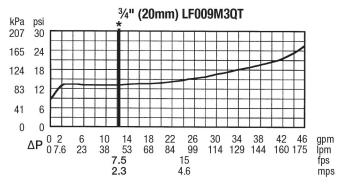
Capacity

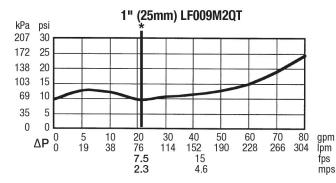
Performance as established by an independent testing laboratory.



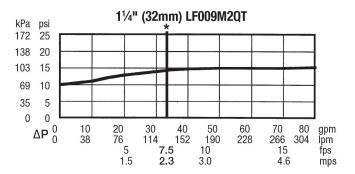


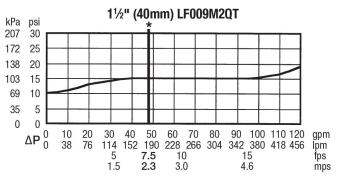


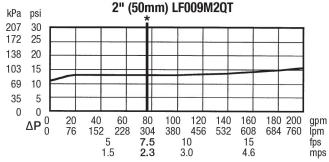


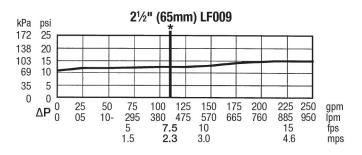


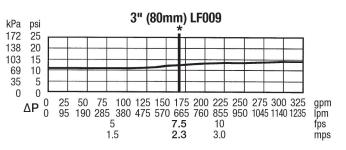
*Typical maximum system flow rate (7.5 feet/sec., 2.3 meters/sec.)











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